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| 10/730,485 | 12/08/2003 | Raymond C. Kurzweil | 13151-006001 | 2555 |

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MINNEAPOLIS, MN 55440-1022

| EXAMINER |
|---|
| GODBOLD, DOUGLAS |

| ART UNIT | PAPER NUMBER |
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| 2626 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

| | Application No. | Applicant(s) |
|---|---|---|
| | 10/730,485 | KURZWEIL, RAYMOND C. |
| **Office Action Summary** | Examiner | Art Unit | |
| | DOUGLAS C. GODBOLD | 2626 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>28 October 2008</u>.

2a)☒ This action is **FINAL**.     2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-31</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-31</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)                    **Office Action Summary**                    Part of Paper No./Mail Date 20090115

## DETAILED ACTION

1.     This Office Action is in response to correspondence filed 28 October 2008 in

reference to application 10/730,485.  Claims 1-31 are pending and have been

examined.


### *Response to Amendment*

2.     The amendment filed October 28, 2008 has been accepted and considered in

this office action.  Claims 1, 2, 5-8, 15-17, 19-21, and 28 have been amended.


### *Response to Arguments*

3.     Applicant's arguments filed October 28, 2008 have been fully considered but they

are not persuasive.


4.     Regarding applicants arguments, see Remarks, pages 1-2, that "a plurality of

track transitions made by plural users," has support in the specification, the examiner

disagrees.  The applicant argues that "nowhere in the specification is 'a user' construed

to mean a solitary user."  However "a user" is usually used to mean one person, and the

specification does not specifically define "a user" to mean multiple users.  Therefore "a

plurality of track transitions made by plural users," has insufficient support in the

specification.

5.      Regarding applicants arguments, see Remarks, pages 2-3, that Bennett does not

teach or suggest a "commercial transaction," the examiner respectfully disagrees.  The

applicant argues that Bennett is only directed towards answering question and providing

information.  However column 8 lines 44-50 teach transactions that are related to

commerce.  While Bennett does not specifically teach buying and selling of goods, it is

noted that the claims do not specifically define a "commercial transaction" as such.

Therefore a commercial transaction could fairly be interpreted as a transaction of

information related to commerce, such as checking a price or the availability of an item.

For at least these reasons, Bennett teaches a "commercial transaction."


### Claim Rejections - 35 USC § 112

6.      The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

7.      Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement.  The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention.

        Independent claims 1, 15 and 28 now all contain newly added limitations

"analyzing, statistically, a plurality of tracked transactions made by plural users to

produce market research information."  However the examiner can not find any support

in the specification for the phrase "a plurality of tracked transactions made by plural

users." Only support for histories from "a user" is found on page 8 first paragraph.

Therefore claims 1, 15 and 28 are rejected under 35 U.S.C. 112 as containing new

matter. Claims 2-14, 16-27, and 29-31 further limit claims 1, 15 and 28 and are

therefore rejected as well.


### Claim Rejections - 35 USC § 103

8.      The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.


9.      **Claims 1-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over

BENNETT (US Patent 7,050,977) in view of SMITH (US Patent 6,853,982).


10.     Regarding **claim 1**, BENNETT teaches a computer implemented method of

conducting commerce ("e-commerce applications", column 8, lines 44-45), the method

comprising:

        receiving a commercial transaction request from a user as text input ("outputs

recognized speech text corresponding to the user's question", column 11, lines 14-15,

checking prices and availability of items are commercial transaction; column 8 line 45-

50);

        using natural language processing to analyze the text input to build a

conversation with the user based on the commercial transaction request ("natural

language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting a commercial transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the commercial transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26);

tracking the commercial transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

BENNETT does not specifically teach analyzing, statistically, a plurality of tracked transactions made by plural users to produce market research information.

In the same field of e-commerce, SMITH teaches analyzing, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information (figure 3A, described column 14 line 44 to column 15 line 8, teaches histories for all users are considered in order to determine similar items and from there generate recommendations, which is in fact market research information. It is inherent that by using histories, statistical analysis is necessary in order to generate recommendations.)

Therefore it would have been obvious to combine the market research of SMITH with the system of BENNETT in order to allow for recommendations to be made to a user that are relevant to the current session of the user (SMITH column 1 lines 10-12).

11.    Regarding **claim 2**, BENNETT further teaches that tracking comprises: searching a database to find related information associated with conducting the commercial transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).


12.    Regarding **claim 3**, BENNETT teaches all of the claimed limitations of claim 1.

However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).


13.    Regarding **claim 4**, SMITH further teaches that the follow-up messages with the user are statistically analyzed to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

14.    Regarding **claim 5**, BENNETT further teaches that the transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

15.    Regarding **claim 6**, BENNETT further teaches that generating the response comprises:

searching a database for content related to the commercial transaction request ("set of potential questions corresponding to the user's query are received as a result of a full- text search", column 25, lines 15-16); and

animating the avatar with a voice and facial movements corresponding to content found in the database ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

16.    Regarding **claim 7**, BENNETT further teaches that animating comprises generating helpful verbal suggestions for conducting the commercial transaction ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

17.    Regarding **claim 8**, BENNETT further teaches that animating comprises processing text input from the user with natural language processing techniques to develop and build conversations between the user and the avatar ("an environment that

emulates a normal conversational human-like question and answer dialog", column 36,

lines 28-29).

18.     Regarding **claim 9**, BENNETT further teaches that receiving the text input is in

response to a suggestion generated by the avatar ("told by character 1440 about how to

elicit the information required", Column 36, lines 14-15).

19.     Regarding **claim 10**, BENNETT further teaches that the program performs an

inquiry for financial information related to the user ("account information", FIG. 18,

column 37, lines 34-35).

20.     Regarding **claim 11**, BENNETT further teaches that the program supports a

sales transaction ("ordering", FIG. 18, column 37, line 33).

21.     Regarding **claim 12**, BENNETT further teaches that the program supports a help

desk inquiry that involves customer support for a product or service ("e-support",

column 36, lines 55-67).

22.     Regarding **claim 13**, BENNETT further teaches that the program supports a

report for customer support to report a malfunctioning product, system, or service ("a

'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-

65).

23.    Regarding **claim 14**, BENNETT further teaches that the program calls another
program to process an inquiry (see FIG. 5, the query is processed by a number of
different modules).

24.    Regarding **claim 15**, BENNETT teaches a computer program product
("microcode and software routines", column 38, lines 57-58) residing on a computer
readable medium ("suitable machine-readable format", column 38, line 61), for
conducting commerce ("e-commerce applications", column 8, lines 44-45) comprises
instructions for causing a computer to:

      receive a commercial transaction request from a user as text input ("outputs
recognized speech text corresponding to the user's question", column 11, lines 14-15);

      analyze the text input using natural language processing to build conversations
with the user based on the transaction request ("natural language engine 190 facilitates
structuring the query to database 188", column 11, lines 20-22);

      conducting a commercial transaction with the user based on the text input
("retrieves an appropriate answer", column 11, line 19);

      generate a voice-synthesized response in accordance with the commercial
transaction through an avatar ("expressed as oral feedback by animated character
agent 157", column 11, lines 25-26);

      track the commercial transaction by storing the transaction in the database
("noun phrases of the string are stored", column 25, line 7).

BENNETT does not specifically teach analyze, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information.

In the same field of e-commerce, SMITH teaches analyze, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information (figure 3A, described column 14 line 44 to column 15 line 8, teaches histories for all users are considered in order to determine similar items and from there generate recommendations, which is in fact market research information. It is inherent that by using histories, statistical analysis is necessary in order to generate recommendations.)

Therefore it would have been obvious to combine the market research of SMITH with the system of BENNETT in order to allow for recommendations to be made to a user that are relevant to the current session of the user (SMITH column 1 lines 10-12).

25.     Regarding **claim 16,** BENNETT further teaches that the instructions to track comprise instructions to:

search a database for related information associated with conducting the commercial transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

26.     Regarding **claim 17,** BENNETT teaches all of the claimed limitations of claim 15.

However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

27.    Regarding **claim 18**, SMITH further teaches that responses to the follow-up messages are received ("rate individual book titles", column 10, lines 17-18) and the responses (see column 9, lines 37-52, ratings information is used) are statistically analyzed to generate marketing related information ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32, where presenting items of interest is equivalent to marketing the item).

28.    Regarding **claim 19**, BENNETT further teaches that the commercial transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

29.     Regarding **claim 20**, BENNETT further teaches that the instructions to generate

the response comprise instructions to:

        search a database for content related to the commercial transaction request ("set

of potential questions corresponding to the user's query are received as a result of a

full-text search", column 25, lines 15-16); and

        animate the avatar with a voice and facial movements corresponding to content

found in the database ("expressed as oral feedback by animated character agent 157",

column 11, lines 25-26).


30.     Regarding **claim 21**, BENNETT further teaches that the instructions to animate

comprise instructions to generate verbal suggestions for conducting the commercial

transaction ("told by character 1440 about how to elicit the information required",

column 36, lines 14-15).


31.     Regarding **claim 22**, BENNETT further teaches that the instructions to animate

comprise instructions to use natural language processing to develop and build

conversations between the user and the avatar ("an environment that emulates a

normal conversational human-like question and answer dialog", column 36, lines 28-29).


32.     Regarding **claim 23**, BENNETT further teaches that the program performs an

inquiry for financial information related to the user ("account information", FIG. 18,

column 37, lines 34-35).

33.     Regarding **claim 24**, BENNETT further teaches that the program supports a

sales transaction ("ordering", FIG. 18, column 37, line 33).


34.     Regarding **claim 25**, BENNETT further teaches that the program supports a help

desk inquiry that involves customer support for a product or service ("e-support",

column 36, lines 55-67).


35.     Regarding **claim 26**, BENNETT further teaches that the program supports a

report for customer support to report a malfunctioning product, system, or service ("a

'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-

65).


36.     Regarding **claim 27**, BENNETT further teaches that the program calls another

program to process an inquiry (see FIG. 5, the query is processed by a number of

different modules).


37.     Regarding **claim 28**, BENNETT teaches a system for conducting commerce, the

system comprising: a server computer (see FIG. 1, block 180, "server-side") for

               receiving a commercial transaction request from a user as text input

       ("outputs recognized speech text corresponding to the user's question", column

       11; lines 14-15);

analyzing the text input using natural language processing to build

conversations with the user based on the transaction request ("natural language

engine 190 facilitates structuring the query to database 188", column 11, lines

20-22);

conducting the commercial transaction with the user based on the text

input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the

commercial transaction through an avatar ("expressed as oral feedback by

animated character agent 157", column 11, lines 25-26); and

tracking the commercial transaction by storing the transaction in the

database ("noun phrases of the string are stored", column 25, line 7).

BENNETT does not specifically teach analyzing, statistically, a plurality of

tracked commercial transactions made by plural users to produce market research

information.

In the same field of e-commerce, SMITH teaches analyzing, statistically, a

plurality of tracked transactions made by plural users to produce market research

information (figure 3A, described column 14 line 44 to column 15 line 8, teaches

histories for all users are considered in order to determine similar items and from there

generate recommendations, which is in fact market research information.  It is inherent

that by using histories, statistical analysis is necessary in order to generate

recommendations.)

Therefore it would have been obvious to combine the market research of SMITH with the system of BENNETT in order to allow for recommendations to be made to a user that are relevant to the current session of the user (SMITH column 1 lines 10-12).

38.    Regarding **claim 29**, BENNETT further teaches:

a client system (see FIG. 1, block 150, "client-side") for sending the text input to the server ("set of speech vectors that are transmitted over communication channel 160", column 11, lines 8-9), with the client system executing a web browser program ("web page in browser 1200", column 38, line 2).

39.    Regarding **claim 30**, BENNETT teaches all of the claimed limitations of claim 28.

However BENNETT does not specifically disclose the generation of follow-up messages.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the recommendation system of SMITH with the e-commerce system of BENNETT so that the received messages will be relevant to the current browsing session (see SMITH, column 1, lines 10-12).

40.     Regarding **claim 31**, SMITH further teaches that the server receives responses

to the follow-up messages ("rate individual book titles", column 10, lines 17-18) and

statistically analyzes the responses (see column 9, lines 37-52, ratings information is

used) to generate marketing related information ("generates a list of additional items

that are predicted to be of interest to the user", column 7, lines 30-32, where presenting

items of interest is equivalent to marketing the item).


### *Conclusion*

41.     Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.  Accordingly, **THIS ACTION IS MADE FINAL**.  See MPEP

§ 706.07(a).  Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS C. GODBOLD whose telephone number is (571)270-1451. The examiner can normally be reached on Monday-Thursday 7:00am-4:30pm Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DCG

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2626